Wolves

For all but the most recent fraction of the last 15 million years, wolf packs roamed from the Arctic tundra to Mexico. But as humans occupied more of the landscape, wolves were regarded as dangerous predators, and loss of habitat and deliberate extermination programs led to their demise. Today, when we have a better understanding of the importance of the wolf as part of a naturally functioning ecosystem, the gray wolf is considered an endangered species throughout its historic range in the lower 48 states except Minnesota. NPS policy calls for restoring native species that have been eliminated as a result of human activity if adequate habitat exists to support them and the species can be managed so as not to pose a serious threat to people or property outside the park. Because of its size and abundance of wildlife, Yellowstone was an obvious choice as a place where wolf restoration would have the best possible chance of succeeding.

In January 1995 and 1996, 31 gray wolves were brought to Yellowstone from Canada—the first wolf packs to reside in the park since the 1930s. The goal of the wolf restoration program is to maintain at least 10 breeding wolf pairs in greater Yellowstone and in each of the two other recovery areas in central Idaho and northwestern Montana. When this goal has been met for three consecutive years, the gray wolf can be removed from the list of endangered species and managed as a resident species by the respective states when found outside of national parks and refuges.

REINTRODUCTION RESULTS

Population growth. Yellowstone's new wolf population has thrived, creating relatively few conflicts with ranching and other human activities. As of late 1999, about 160 wolves roamed the monitored area, including dozens of pups born the previous spring. The wolves were traveling in at least nine packs, with several wolves wandering alone, seeking mates, or in groups that did not have a breeding pair.

Since the first wolf reintroductions in 1995, 63 wolves are known to have died or had to be removed from the wild; at least 22 of these were pups that did not survive beyond their first few months, as is expected in a wild population. Although the cause of death cannot always be confirmed, it appears that in addition to the II wolves that were legally killed because of livestock predation, at least 13 wolves died from natural causes including 6 from intrapack conflict; 7 died in collisions with vehicles, 7 were shot illegally, and one was accidentally killed by a trap set for coyotes.

Nearly all of the existing packs have established territories within the park. Survival of reproducing pairs and their offspring outside park boundaries remains problematic. Yet, if the overall trends continue, the recovery goal for the gray wolf population in greater Yellowstone can likely be achieved by 2002.

Managing Yellowstone's Wolves

The U.S. Fish and Wildlife Service, which bears the primary responsibility for ensuring compliance with the Endangered Species Act, oversees wolf restoration in the three recovery areas. In Yellowstone, two park wildlife biologists are dedicated full-time to the project, with one assistant and from two to six volunteers. To facilitate monitoring and research, all of the wolves brought from Canada were radio-collared before release, and it is anticipated that up to half of the wolves born here will continue to be radio-collared as they become large enough to be safely captured and handled. Wolf project staff conduct aerial telemetry surveys and ground tracking to monitor the wolves' movements.



Although killing or harassing an endangered species is ordinarily illegal except in defense of

human life, the controversy surrounding wolf reintroduction led to special rules for managing them. Livestock owners are permitted to harass a wolf found on their property or near livestock on public rangeland, and they may kill a wolf caught preying on livestock on their own land. Wolves that prey on livestock that are legally grazing on public land may be relocated or killed. As with other species, sometimes individual animals must be sacrificed in order to reach the goal of saving the population.

Predation. Wolves survive by killing other animals and scavenging on animals that have died from other causes. Yellowstone's wolves have preyed primarily on elk, but have also taken some deer, bison, pronghorn, and moose. It was anticipated that as the wolves brought from Canada established their territories, some would leave the park and travel across or inhabit private land, and that some of the 412,000 livestock in greater Yellowstone would be preyed upon. Based on wolf predation in other areas, the Environmental Impact Statement for the reintroduction program predicted that the Yellowstone wolves would kill 20 to 28 sheep and cattle during the first two years. The reintroduced wolves took no domestic livestock in 1995, and preyed on 12 sheep in 1996; the one wolf responsible was killed.

During 1997, two wolves that had killed a total of one cow and three sheep were legally shot in separate incidents when caught preying on the livestock. Although an additional 65 sheep and 5 cattle were also preyed upon by wolves that year, just one female

wolf was responsible for 56 of the sheep deaths near Pinedale, Wyoming; both she and the other four wolves involved in these predations were killed by federal agents.

In 1998, despite a growing wolf population, only three cattle and four sheep were lost to wolf predation; the three wolves responsible were killed.

To help lessen the negative consequences of a program they strongly support, Defenders of Wildlife has so far paid ranchers \$18,162 to compensate for livestock that were killed by wolves in the reintroduction program.

Sightings by visitors. Although the wolves brought from Canada, where they can be hunted and trapped, were expected to remain largely out of sight in Yellowstone, they seemed to quickly adapt to life in a national park. From roadside pullouts in the Lamar Valley, thousands of visitors have been able to watch a wolf pack as close as half a mile away as the wolves play, rest and interact with other wildlife—and many other people have heard the wolves howling. From 1995 to 1997 a ranger-naturalist obtained donations to support his own position as a specialist in wolf interpretation, guiding thousands of interested wolf watchers on walks and helping them spot wolves from a safe and respectful distance.

In legal limbo. In December 1997, Judge William Downes, ruling in consolidated lawsuits filed by the the Wyoming Farm Bureau Federation, the National Audubon Society et al., and James and Cat Urbigkit found that the wolf reintroduction program in Yellowstone and central Idaho violated the intent of section IO(j) of the Endangered Species Act because of the lack of geographic separation between the fully protected wolves already present in Montana and the wolves in the reintroduction areas where special rules for wolf management apply. The judge wrote that he was "especially mindful of the concerted efforts of the Government and wolf recovery advocates to accommodate the interests of stockgrowers and others who may be adversely affected by the wolf recovery program," and reached his decision "with the utmost reluctance." He ordered the removal (and specifically not the killing) of the reintroduced wolves and their offspring from the Yellowstone and central Idaho experimental population areas, but immediately stayed his order pending an expected appeal. Canada has stated it will not take back the wolves, and their relocation to another wild ecosystem in North America is unlikely. In February 1998, the U.S. Department of Justice filed an appeal of Judge Downes' decision and the judge heard arguments in August of 1999; as of this writing, the fate of the reintroduced wolves and their offspring is in doubt.

Program Needs

- Donated funds and labor. The Yellowstone wolf restoration program would not have been possible without the efforts of many volunteers and donations from private individuals and institutions. The Yellowstone Park Foundation has been involved in several initiatives to benefit the wolf project and has raised more than \$250,000 in private funds since 1995. The success of wolf restoration in Yellowstone will continue to depend on this kind of support.
- Monitoring. Yellowstone's wolves must continue to be closely monitored to learn about their effects on other ecosystem inhabitants, to respond to any problems that may arise, and to determine if the goal of a self-sustaining population of wolves has been reached. A plan has been developed to document wolf survival and mortality, population size, distribution and dispersal, and the effects of wolf predation on various wildlife species, but additional funding and staff are needed to carry it out.
- Education. Presentation of information about wolf recovery and ecology must continue as part of ongoing programs to present accurate information to the public.





WOLF RESTORATION

STEWARDSHIP GOALS



Together with neighbors and partners, Yellowstone participates in a broad effort to restore gray wolves to the ecosystem.



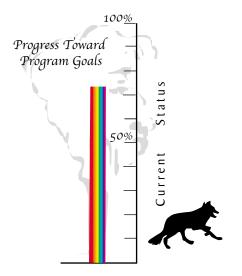
Professionally trained wildlife biologists maintain a sound program of scientific research and monitoring of wolves and their relationships with other species.



Yellowstone staff provide assistance with wolf management outside the park when requested.



Visitors' enjoyment of Yellowstone is enhanced through viewing opportunities and educational programs on wolf ecology that aid public understanding and appreciation of this endangered predator.



Current State of Resources/Programs



As of 1999, more than 160 wolves live in greater Yellowstone, surviving mostly on elk and other native prey. Although well on their way to meeting the recovery goal, a legal order to remove the wolves was announced in December 1997 and their fate awaits an appeals court decision.



Park biologists and other researchers have established ongoing studies to track the wolves' behavior and their effect on other species.



Park staff assist in aerial tracking flights, wolf control actions when needed to deal with livestock predators, and relocation of nuisance wolves back into the park as requested by the U.S. Fish and Wildlife Service.



Biologists, public affairs staff, and interpreters provide printed information, talks, and interviews to meet the demand for news about the Yellowstone wolves. Many visitors have seen or heard wolves in the park without causing danger to themselves or the wolves.

1998 FUNDING AND STAFF Recurring Funds Yellowstone N.P. Base Budget \$ 221,000

Non-Recurring Funds
One-time Projects \$ 37,700

Staff 2.4 FTE

The human resources and funding necessary to professionally and effectively manage the park to stewardship levels will be identified in the park business plan.